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10/538,006

10/27/2005

Fredrik Ohlsson

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EXAMINER

FERNSTROM, KURT

ART UNIT

PAPER NUMBER

3711

MAIL DATE

DELIVERY MODE

05/12/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/538,006 | Applicant(s) OHLSSON, FREDRIK | |
| | Examiner Kurt Fernstrom | Art Unit 3711 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>6/3/05; 6/27/05</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

Claims 23 and 29 are objected to because of the following informalities: In claim 23, line 11, "and" is misspelled as "arid". In claim 29, line 6, "force" is misspelled as "farce". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10 and 21-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With respect to claims 10 and 22, the term "said crank block" lacks antecedent basis. With respect to claim 21, the term "said locking member" lacks antecedent basis. With respect to claims 23-34, the claims contain numerous examples of the term "preferably". This term renders the claim indefinite, because it is not clear whether the ensuing claim language is part of the recited invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 3711

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 12-14, 16-19, 23, 24 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by HT Medical Systems (WO 99/39317). HT Medical Systems discloses in the drawings and specification a device for simulating an interventional operation comprising a plurality of moveable carriages 706, 708, 710, an interconnecting member which connects the carriages serially, and openings and capturing members in the carriages for receiving and securing real instruments. HT Medical Systems further discloses the use of sensors, pulleys and other elements to provide force feedback during operation of the device, as well as a track. With respect to claims 2 and 3, HT Medical Systems discloses that the interconnecting member is a telescopic pipe with an opening for receiving the instruments. With respect to claims 4, 12 and 13 “for detecting the type of real instrument” and “to detect the type of real instrument” are examples of functional language which describes the intended purpose of the device, and under MPEP 2114 is not deemed to have patentable weight. HT Medical Systems discloses a detecting arrangement. With respect to claim 5, HT Medical Systems discloses a control unit as recited. With respect to claims 6 and 8, HT Medical Systems discloses that the carriages move along the track via a transmission. With respect to claim 7, the carriages inherently have an actual position and a simulated position, as they move during the simulation. With respect to claim 14, “are categorized” is a broad term, instruments inherently have different characteristics and can be categorized as recited. With respect to claim 16, HT Medical Systems discloses

the interconnecting members as recited. With respect to claims 17 and 18, HT Medical Systems discloses the processing unit as recited. With respect to claim 19, the end of the instrument is inherently simulated during operation. Claim 24 primarily recited functional language and does not overcome the HT Medical Systems reference for the reasons discussed above. HT Medical Systems discloses two controllers. With respect to claim 32, HT Medical Systems discloses a resistance generating arrangement as well as a capturing member which clamps the instrument in place.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-11, 15, 20-22, 28-31, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over HT Medical Systems. HT Medical Systems discloses all of the limitations of claims 9, 10, 22 and 33-34 with the exception of the structural elements of the crank block device. While HT Medical Systems does not explicitly disclose a crank block as recited, this is considered to be an obvious variation on the teachings of HT Medical Systems, as it operates in substantially the same way during operation of the simulation device. Similarly, the elements of the force sensor and optical sensor of claims 11 and 15 respectively, as well as the locking member elements of claims 20, 21,

28 and the feedback elements of claims 29-31, are also considered to be an obvious variation on the teachings of HT Medical Systems.

Allowable Subject Matter

Claims 2-27 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to disclose or suggest a device having all of the claimed limitations. There is no suggestion in HT Medical Systems or in the other prior art of an identification means for identifying a real instrument that performs substantially the same function in substantially the same way as that recited in applicant's disclosure.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wallaker, Gregorio, Chosack, Yanof, Cunningham, Gillio, Martin and Rosenberg disclose various devices for providing force feedback during simulations.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kurt Fernstrom whose telephone number is (571) 272-4422. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Kim can be reached on 571 272-4463. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kurt Fernstrom/
Primary Examiner, Art Unit 3711

May 8, 2008